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THE SCIENTIFIC SPIRIT IN THEOLOGICAL STUDY AND TEACHING

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The scientific spirit first calls for definition, or at least for description; for spirit is atmospheric and elusive and always difficult of definition, refusing to be caught and caged within the hard and fast limits of verbal lines. Yet the phrase stands for a method and temper of study the nature of which is distinctly felt and is sharply contrasted with some other types of mind. We shall therefore first describe the scientific spirit and then make some applications of it to theological study and teaching.

I

It may be said that the fundamental mark of the scientific spirit is the simple search for fact and truth. Its first thought and aim is, What are the facts? It is not, what do we think or wish the facts to be, or, what have others thought them to be, but what are the facts themselves. The aim of the scientific spirit is to go straight to reality and find out the truth about it. It is therefore at bottom an honest love for the truth and a desperate attempt to get at it.

Thus, for ages men believed and taught and made it a part, not only of their science, but of their very religion, that the sun revolves around the earth. This doctrine became invested with sacrosanct authority and finality, and to doubt it was damnation. Copernicus thought he should inquire into the struc-

ture of the solar system and find out the truth as to its motions, and he proved, what others before him had suspected, that the true motion is the other way, and that the earth moves around the sun. This announcement seemed to upset the heavens and precipitate them into confusion, and it created a great commotion among the scientists, and especially among the clergy. The priests said it destroyed the Bible, but Copernicus appealed directly to the facts in the case, and this appeal finally convinced the entire world of the truth of his theory, and now nobody doubts it. This instance illustrates, not only the nature, but also the beneficent outcome of the scientific spirit, for in this case it tore down the low-roofed hut of heavens that cabined and confined all human thought, and gave us the unspeakably grand heaven that has immeasurably broadened all our views.

We may describe the scientific spirit more closely as being marked by unprejudiced impartiality and candor in its search for truth. It is unprejudiced in that it does not start out with the conclusion of its investigation silently assumed, or with prejudgments that force or affect the conclusion. It is free from self-interest whether of any material kind or of the pride of opinion or of self-consistency. It is dispassionate in that it does not allow feeling to flood

the mind so as to drown processes of reasoning that are properly purely intellectual, or passions to blow out the lamp of the mind or cloud its vision and judgment. It strives to see fact and truth in the cold, white light of reality.

The scientific spirit is fair and candid in that it strives to consider all the facts and to face all difficulties, and it gives a full audience to all opposing theories. It does not pick out such facts as make for some particular theory, and suppress or ignore all others. It refuses to twist and color any facts to make them fit any theory, but it makes theory fit facts. It is especially impartial and candid in its attitude toward difficulties, and tries to see them in their full force.

We may further define or describe the scientific spirit by contrasting it with some other types of mind. The partisan spirit is known of all men. It has some personal interest, more or less open or concealed, that underlies and shapes, or at least colors, all it sees and does. It is highly selective, and selective for a purpose. Its mind acts as a sieve that lets through only such facts as fit its purpose, or as a colored lens that dyes or tinctures all its objects. It goes at a case of investigation after the style and spirit of a criminal lawyer of the worst type, bringing out and magnifying all facts that seem in its favor and fiercely cross-examining and browbeating all unfavorable evidence, and not failing to cast suspicion and abuse upon the witnesses and defenders of any different view. It goes the length of misrepresenting the evidence in the case, and indulges in all manner of insinuation and aspersion against those who may not

agree with it. It loses the coolness and calm and poise of a judicial spirit, and grows heated and excited, if not passionate and violent. It is bound to win its case at all cost.

Another closely related method of study contrasted with the scientific spirit is the dogmatic type and temper of mind. The fundamental principle of this method is authority, running into emphatic assertion of personal opinions as though they were positive facts, and tending toward presumption and arrogance of tone and temper. This spirit vividly sees all things in the light of its own principles and opinions, and is dim-eyed, if not blind, to all that lies outside the area of its own inner illumination. It is strongly committed to some doctrine which may rest on tradition and authority and which it holds to be fundamental and sacred—the ark of God to touch which is folly to be punished with severity. It is fearful of whatever would seem to endanger or change this accepted body of dogma, and keeps it within a sacred inclosure where nothing that seems unfriendly is permitted to intrude. Any reasoning or theories or facts that seem to threaten it are ruthlessly suppressed or explained away. Even to doubt this dogma is incipient damnation. Let this doctrine stand though the heavens fall. These methods of thought that are opposed to the scientific spirit have been stated with some exaggeration to bring out their real nature; but they exist and could easily be concretely illustrated in their most extreme degrees.

It is true that there are necessary assumptions, axioms, intuitions, that underlie all our thinking, scientific

not less than ethical and religious, but these fundamental principles or categories are easily distinguished from partisan prejudices and dogmatic assumptions.

The scientific spirit is thus marked by the sincere search after truth, and is unprejudiced, impartial, candid, fair, and honest in all its attitudes and aims in relation to reality; and it is contrasted with the partisan and dogmatic method and temper in their disposition and effort to see things in their own light and prove their preformed conclusions.

A concrete illustration of the scientific spirit may be seen in such a work as Mr. Darwin's *Origin of Species*. No matter whether the reader of that epoch-making book is persuaded of the truth of the doctrine of evolution it sets forth or not, he cannot fail to be impressed with, and to admire, its transparently truth-seeking spirit. Mr. Darwin assembles a vast mass of facts bearing on his theory, but they do not all seem to support it or to be reconcilable with it, and it is beautiful to see how fairly he states and faces these difficulties and confesses his inability to adjust them completely into conformity with his doctrine. In fact nowhere else are the objections to his theory of evolution stated more strongly and more convincingly than in this very book. The candor and caution, the unprejudiced fairness and honesty of the book, are its outstanding features, and it will ever remain as a splendid monument of the scientific spirit.

Let us hasten to say that all scientific authorities and writers are not characterized by the scientific spirit. While

these investigators are marked by this spirit as a class, perhaps above any other class, yet there are some glaring instances among them of partisanship and dogmatism, and they are all more or less infected by these infirmities. On the other hand, theologians, taking the term in its widest sense as including all religious thinkers, are not to be condemned wholesale as lacking in the scientific spirit. Many of them are as sincere seekers after truth and as little marked by the partisan spirit and the dogmatic temper as Darwin himself. Yet it must be admitted that partisanship and dogmatism have infected the theological more than they have the scientific mind. The *odium theologicum* has long been the scandal of the theological world. The great work of ex-President Andrew D. White, himself a Christian communicant, on the *History of The Warfare of Science with Theology in Christendom* is a mournful monument of the attitude and opposition of theology and the church to the progress of truth. This unfriendly and often hostile attitude has done immense damage to religion, and is still the cause of much prejudice against theology on the part of scientific men and cultivated people. It has greatly abated in recent years and is a waning spirit which we may hope will finally wholly disappear. The old-time attitude of theology and the church toward the progress of human learning is no longer respectable, and only relics of it now survive in some quarters.

II

We may now proceed to make some applications of the scientific spirit to theological study and teaching.

1. The first thing we are likely to think of in this connection is the study of the Bible. Is this a book among books that is subject to scientific methods of study? Must it be subjected to the same searching, impartial, pitiless investigation that is applied to other books? Or is it a book apart from other books which is hedged around with a sacredness that protects it from such processes? Our answer will be unanimous that it should be submitted to the most thoroughgoing scientific study. No other answer would be tolerable or respectable in our day.

On the other hand, the book has a right to fair treatment, which is indeed part of the scientific spirit. It should not be approached in a prejudiced unfriendly spirit. Any theory or assumption that the supernatural is impossible as a basic principle of the study of the Bible would be as unscientific as a like assumption of any theological dogma. The scientific spirit as applied to the Bible must go to it unfettered by any assumption and simply inquire into its facts.

This is the constant spirit and bidding of the Bible itself. All the way through it urges us to reason together concerning these things, to search and see, and to try the spirits whether they be of the truth. The Bible displays none of that anxiety for itself which we frequently feel and manifest for it. It is calmly unconcerned for, and unconscious of, all the critical questions with which we vex ourselves, and is simply bent on telling us the truth. It has no aim or thought other than the truth, and wants us to test its facts and doctrines with every

knife and acid and flame of investigation and trial. It is itself pervaded by the scientific spirit and has been a powerful means of creating and spreading this spirit in the world.

Our higher critics are right, then, in investigating the Bible and searching out every fact and hint bearing on the origin and authorship, age and authenticity, unity and credibility, of its various books. They should spare no means and pains in reaching the truth on these points. And, as a class, it is evident that they are honest inquirers, who have no thought of destroying or impairing the Bible, but are simply and sincerely intent on finding out the truth about it; they are seeking to clear it of erroneous traditional theories and views, and to put it on the rock of reality; and the book as they interpret it, speaking now of the reasonable critics who mainly agree in their conclusions, is more real and human and useful, safer on its foundations, and fuller of divine inspiration and power than the book as interpreted by some former critics. However this may be, we should stand up for the process of criticism, and bid it go on and go through to its logical end; and we should not be afraid of it, much less should we disparage and misrepresent it, and pour upon it our vituperation, which is simply a way of getting mad and calling names and thereby showing our incapacity to deal with it on proper grounds or, worse still, our disloyalty to the very spirit of truth.

It is not at all insinuated in these remarks that conservative critics as a class are lacking in the scientific spirit of truth-seeking, for many of them are as honest as men can be; but the defense of the Bible has undeniably been too

much infected with special pleading and partisanship, which, however well meant, does harm to the very cause it would defend. The book will stand as a rock and continue to exert its power only as we let every wave and storm of criticism beat against it so that it may continually show its own inherent reality and truth.

The same scientific spirit should be applied to our study of doctrines and to the whole system of truth which we hold. These doctrines are ever open to investigation and to restatement in the light of our growing knowledge.

2. We pass finally to the use of the scientific spirit in the work of teaching in the theological classroom. This instruction should be conducted in an atmosphere of the freest inquiry and the frankest expression of belief. The sincere and evident aim of the teacher should be to present the facts, and all the facts, in their right proportion and relation, and to aid the students in seeing them and putting them in their right relations for themselves. There should be little dogmatic teaching or teaching by pure authority. Nothing should be put into the minds of the students as water is poured into vessels or as pre-digested food is put into the stomach or injected into the veins, but the facts should be given and the students trained to masticate and digest them in their own mental processes and spiritual experience. Of course the teacher has and should have convictions of his own, and he will let them be known; they will inevitably underlie and come out in his teaching; but he should not impose these, by his authority or by the authority of the church, on his students,

but should serve as their guide in leading them into the facts and in forming their own conclusions. The teacher should be guided by, and should exemplify, Paul's principle and advice: "Let every man be fully persuaded in his own mind." The teaching of the theological seminary should not produce repeating parrots, but thinking persons who speak that they do know and testify that they have seen, for only such thinkers will preach with that root and accent of conviction which will convince others. "Sayest thou this thing of thyself, or did others tell it thee?" was the searching question that Jesus put to Pilate, and it is a question that still goes to the root of our teaching and preaching.

In such teaching the partisan and dogmatic spirit will be conspicuous by its absence, and an air of fairness and frankness, candor and calmness, and confidence will pervade the very room. There will be an evident disposition not to hide or twist or color up any fact, but all the facts will be fully brought out, every difficulty will be fairly faced, and what cannot be explained will be left in the shadows or in the dark. There will be none of that air of omniscience that jauntily settles everything offhand, but the limitations of knowledge and faith will be frankly acknowledged. Such instruction will lead to faith that may be more limited and less certain at some points than was yielded by some former methods of instruction, but it will be more deeply and surely grounded, and will be less in danger of peril when it comes into open contact with the scientific spirit of truth-seeking which more and more rules the world.

An illustration from personal experience may here be permitted. The writer went through the theological seminary and, without disrespect to his teachers, he can say that about all he learned concerning the higher critics was that they were bad men whose books it was dangerous to touch. One of the first books that fell into his hands after leaving the seminary was Wellhausen's *History of Israel*. He began to read it with fear and trembling, but soon was surprised to discover the evident honesty of the scholar, who was not trying to destroy the Bible, but was endeavoring to get at the truth about it. And then the writer felt that the theological seminary had in a measure deceived and wronged him. There followed several years of study of the subject, in which he had many anxious and perilous hours as he found himself afloat on an unknown sea, without knowing how to handle the chart and compass and rudder he should have been taught to use in the seminary. Who knows in how many instances this experience has been repeated and still is being repeated?

The simple fact is that we may so instruct students in the seminary with

one-sided and partisan teaching that when they get out into the ministry they may, to their surprise and dismay, find out facts that may involve them in grave anxiety and peril. In our solicitude to indoctrinate them in our views we may leave them exposed in later years to modes of thought that may undermine their dogmatic foundations. Our very teaching may leave in their minds seeds of distrust that afterward may spring up in doubt or downright skepticism. Little as we know it or suspect it, doubters and incipient infidels may go right out of our theological classrooms, rebelling against the method and spirit of the instruction given there. Surely we should take heed how we teach as well as how we hear.

Only the truth is rock and will endure; all else is sand and will melt away. The scientific spirit is simply the love of truth, and is the very spirit of Him who said, "I am the truth." This spirit should pre-eminently mark and move his followers and should especially pervade all our religious study and teaching. "To love truth for truth's sake," said John Locke, "is the principal part of human perfection in this world, and the seed-plot of all other virtues."